



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

October 20, 2017

Patricia McFadden
Registration Manager
Advan, LLC
2525 Meridian Parkway Suite 350
Durham, NC 27713

Subject: Notification per PRN 98-10 – ABNs and minor label revisions
Product Name: ANDIAMO
EPA Registration Number: 83070-14
Application Date: 09/21/2017
Decision Number: 534218

Dear Ms. McFadden:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

The alternate brand names *Volantis* and *Volantis Fungicide* have been added to the product record:

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, please contact Maryam K. Muhammad by phone at 703-347-0301, or via email at Muhammad.maryam@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to be "H. Johnson".

Hope Johnson, Product Manager 21
Fungicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Group	3	Fungicide
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Andiamo™

[ABN: Volantis; Volantis Fungicide]

ACTIVE INGREDIENT:

Tetraconazole: 1-[2-(2,4-dichlorophenyl)-3-(1,1,2,2-tetrafluoroethoxy) propyl]-1H-1,2,4-triazole..... 20.5%

OTHER INGREDIENTS 79.5%

TOTAL 100.0%

Contains 1.9 pounds of tetraconazole per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
Emergency phone numbers	(800) 424-9300 CHEMTREC (transportation and spills) (800) 222-1222 Poison Control Center

EPA Reg. No.: 83070-14

EPA Est. No.: _____

Net Contents: _____ [gallons] [gal.] [(liters)]

[Lot number begins with xx]

[label date/lot code]

Manufactured for:

Advan LLC
2525 Meridian Parkway, Suite 350
Durham, NC 27713

OPTIONAL LANGUAGE THAT MAY APPEAR ON THE LABEL

[See additional Precautionary Statements and Directions for Use inside [the] [book[let].]

[Application Type AG Agriculture]

[Read the [entire] label [carefully] before [using this product.] [opening the container.]

[Peel back [label] [book] here

[Product of _____] [Note: if manufactured in a country other than the US, country name will appear here]

NOTIFICATION

83070-14

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

10/20/2017

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Caution. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, and viton ≥ 14 mils.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms adjacent to treatment areas. Exercise caution when making applications of this product, and do not apply when atmospheric conditions favor drift or runoff. Do not contaminate water when disposing of equipment washwater or rinsate.

In order to mitigate concern for reproductive effects to endangered bird and mammal species which may occur incidentally in sugarbeet growing areas, you are required to ascertain through the state Department of Agriculture, or Cooperative Extension Service, whether the treatment area may contain habitat of federally listed bird and mammal species; if so, treatment must be avoided in these areas.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the REI of 12 hours. PPE required for early entry to

treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

PRODUCT USE INFORMATION

Andiamo is a microemulsion concentrate fungicide containing the active ingredient tetraconazole that is intended to be used to control certain fungal diseases in peanuts, pecans and sugarbeets.

Apply Andiamo in a water carrier by spraying onto crop surfaces that are intended to be protected from disease. To obtain adequate coverage of typical agricultural crops, apply in a minimum of 100 gallons per acre for dilute sprays and a minimum of 10 gallons per acre for concentrate ground sprays or aerial applications. Both ground and aircraft methods of application may be used.

Andiamo should be added to the spray tank while filling with water. Keep the agitator running when filling spray tank and during spray operations. When tank mixing this product with other pesticides, observe the more restrictive label limitations and precautions. Do not exceed any label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Combination in the spray tank with other pesticides, fertilizers or surfactants is not recommended unless prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use. When an adjuvant is to be used with this product, Advan LLC recommends the use of a Council of Producers and Distributors of Agrotechnology (CPDA) certified adjuvant.

Resistance Management Information

Andiamo contains tetraconazole, a Group 3 fungicide (sterol biosynthesis inhibitor). Fungal isolates with acquired resistance to Group 3 may eventually dominate the fungal population if Group 3 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Andiamo or other Group 3 fungicides.

To delay fungicide resistance consider:

- Avoiding the consecutive use of Andiamo or other target site of action Group 3 fungicides that have a similar target site of action, on the same pathogens.
- Using tank-mixtures or premixes with fungicides from different target site of action Groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.
- Basing fungicide use on a comprehensive IPM program.
- Monitoring treated fungal populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or local Advan LLC representative for fungicide resistance management and/or IPM recommendations for specific crops and resistant pathogens.

Rotational Crop Restrictions

Refer to the table below for the minimum time intervals required between the last application of Andiamo and a new crop planting.

Crop	Rotational Interval (in days)
Corn	0
Grains, small (barley, buckwheat, millet, oats, rice, rye, triticale and wheat) following a sugarbeet application	45
Grape	0
Peanut	0

Crop	Rotational Interval (in days)
Pecan	0
Soybean	0
Strawberry	0
Sugarbeet	0
Sugarcane	45
All other crops	120

CROPS

PEANUTS

Diseases Controlled	Product Rate per Acre	Application Directions
Early leaf spot (<i>Cercospora arachidicola</i>) Late leaf spot (<i>Cercosporidium personatum</i>) Web blotch (<i>Phoma arachidicola</i>) Rust (<i>Puccinia arachidicola</i>)	4.0 – 7.0 fl. oz.	Apply when conditions favor disease, generally when leaf wetness first occurs, or 30 to 40 days after planting. Repeat applications on a 14-day schedule if conditions remain favorable for disease. A multi-site mode of action fungicide, such as Echo (or other Chlorothalonil based products) should be used in combination with this product to reduce risk of resistance. Consult with your Extension Service representatives for guidance on the proper use of this product in programs which attempt to minimize the occurrence of disease resistance to fungicides.

RESTRICTIONS

- Do not apply within 14 days of harvest (digging).
- Do not allow livestock to graze in treated areas.
- Do not feed hay or threshings from treated fields to livestock.
- Do not apply more than 0.41 lb of tetraconazole active ingredient per acre per year.
- Do not apply more than 28 fl. oz. of this product per acre per year.
- Do not exceed 4 applications per year.

PECANS

Diseases Controlled	Product Rate per Acre	Application Directions
Scab (<i>Cladosporium caryigenum</i>) Downy spot, Leaf blotch (<i>Mycosphaerella spp.</i>) Vein spot and/or Liver spot (<i>Gnomonia spp.</i>) Powdery mildew (<i>Microsphaera penicillata</i>) Brown spot (<i>Cercospora fusca</i>) Zonate leaf spot (<i>Cristulariella</i>)	6.0 - 8.5 fl. oz.	Apply this product at intervals of 14 to 21 days, beginning when conditions are favorable for scab or other foliage and nut hull diseases. Apply in adequate water to provide complete coverage. Spray volumes of at least 100 gallons per acre should be used for ground applications and at least 10 gallons per acre for aerial applications. Include this product in a disease control program, and alternate applications with a non-triazole fungicide.

<i>moricola</i>)		Lower specified rates may be used when in tank mix with other non-triazole fungicide which is registered for use on pecan.
RESTRICTIONS <ul style="list-style-type: none"> • Pre-harvest Interval: 30 days. • Do not apply after shuck split. • Do not graze or feed cover crops grown in treated areas to livestock. • Do not apply more than 0.5 lb of tetraconazole active ingredient per acre per year. • Do not apply more than 34 fl. oz. of this product per acre per year. • Do not exceed 4 applications per year. 		

SUGARBEETS

Diseases Controlled	Product Rate per Acre	Application Directions
Cercospora Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe</i>) Ramularia (<i>Ramularia beticola</i>)	6.8 fl. oz.	Apply when conditions are favorable for Cercospora Leaf Spot, Powdery Mildew, or Ramularia. Do not make more than one application of this product per growing season. To obtain adequate coverage of typical agricultural crops, total spray volume usually ranges from 20 to 150 gallons per acre for dilute sprays, and 5 to 10 gallons per acre for concentrate ground sprays and aircraft applications.
RESTRICTIONS <ul style="list-style-type: none"> • Pre-Harvest Interval: 14 days • Do not apply more than 0.101 lb of tetraconazole active ingredient per acre per year. • Do not apply more than 6.8 fl. oz. of this product per acre per year. • Do not make more than one application of this product per year. 		

CHEMIGATION INSTRUCTIONS AND RESTRICTIONS

Apply this product only through one or more of the following types of systems: sprinkler (including center pivot), lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation system. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

For specific information about calibration, contact State Extension Service specialists, equipment manufacturers, or other irrigation experts.

Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make the necessary adjustments should the need arise.

Prevent the movement of Andiamo into the soil:

- Minimize pesticide contact with the soil surface by chemigating above the crop canopy.
- Stop chemigation when pesticide mixture is observed running off crop surfaces or after 0.25 inches of water has been applied, whichever occurs first.
- Allow for sufficient time after chemigation for crop surfaces to dry prior to expected rainfall or to irrigation applied above the crop canopy.

Sprinkler Chemigation

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump motor when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, fill nurse tank half full with water. Add Andiamo slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, etc. should be added last. If compatibility is in question, use the compatibility jar test before mixing a whole tank.

Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures.

Andiamo should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

Aerial Drift Reduction Information **INFORMATION ON DROPLET SIZE**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable conditions (see WIND,

TEMPERATURE).

CONTROLLING DROPLET SIZE

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift potential.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

WIND

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, small drops, etc.).

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a dry, temperature-controlled, secure place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

CONTAINER HANDLING

[Containers less than or equal to 5 gallons]: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

~~Containers \geq 5 Gallons~~ **[Containers more than 5 gallons] Non-refillable container.** Do not reuse or refill this container. Triple rinse ~~or pressure rinse~~ container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.** Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Bulk Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When the container is empty, replace the cap and seal all openings that have been opened during use and return to the point of purchase or to a designated location named at the time of purchase of this product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, call CHEMTREC at (800) 424-9300.

If the container is damaged and leaking or material has been spilled, follow these procedures:

- Cover spill with absorbent material.
- Sweep into disposal container.
- Wash area with detergent and water and follow with clean water rinse.
- Do not allow to contaminate water supplies.
- Dispose of according to instructions.

If not returned to the point of purchase or to a designated location, clean empty container as instructed above and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

THIS CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

WARRANTY AND LIMITATION OF DAMAGES

Conditions of sale: To the extent consistent with applicable law, Advan LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to Advan LLC. ADVAN LLC DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. To the extent consistent with applicable law, ADVAN LLC SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND ADVAN LLC'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. BUYER AND USER ACKNOWLEDGE AND ASSUME ALL RISKS AND LIABILITY RESULTING FROM HANDLING, STORAGE AND USE OF THIS PRODUCT. ADVAN LLC DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.

Andiamo is a trademark of Sipcam Agro USA, Inc.

Andiamo (EPA Reg. No. 83070-14) (Notification 09-21-2017)